



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/741,807	12/22/2000	John B. Abjanic	42390P9672	9053

8791 7590 06/14/2004

BLAKELY SOKOLOFF TAYLOR & ZAFMAN
12400 WILSHIRE BOULEVARD, SEVENTH FLOOR
LOS ANGELES, CA 90025

EXAMINER

ORTIZ, XIOMARA Y

ART UNIT	PAPER NUMBER
----------	--------------

2141

DATE MAILED: 06/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/741,807

Applicant(s)

ABJANIC ET AL.

Examiner

Xiomara Y. Ortiz

Art Unit

2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-14 and 17-37 is/are rejected.
- 7) ☒ Claim(s) 5, 15 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Objections

3. Claim 5 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. In claim 4, the transformer selects a transformation template to transform a message based on matching one of a plurality of patterns or values mentioned, which includes as one of the options, a validation template or a reference to a validation template. Claim 5 is objected because if the matching is based in other value or pattern that is not related to a validation template, claim 5 does not further limit claim 4.

4. Claim 15 is objected to because of the following informalities: In claim 14, the validator validates the message and then removes validation instructions and/or adds to the message an indication that the message has being validated. Claim 15 is objected because if the validator removes the validation instruction, the validator cannot pass at least a portion of the validation instructions to the transformer. Claim 15 is also objected because if the validator adds to the message an indication that the message has being validated in claim 14, claim 15 lacks antecedent basis for the validation instructions. Appropriate correction is required.

5. Claim 16 is objected to because it is depending on claim 15.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 36 and 37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 36 recites the limitation "third format" in page 50 line 4. There is insufficient antecedent basis for this limitation in the claim. For examining purposes, the examiner interprets the claim as transforming the second message from a third format to a fourth format.

As for claim 37, this depends on claim 36, and therefore carries the same rejection under 35 U.S.C. 112, second paragraph.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 (e) that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the

international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-4, 6, 21, 22-23, 29, 30, 32, and 34-37 are rejected under 35 U.S.C. 102(e) as being anticipated by Brody et al. U.S Patent No. 6,278,697 B1.

Regarding claim 1, Brody discloses a transformer to transform a message from a first format to a second format; and a switch to switch the transformed message to a selected processing node, (Brody col.7 lines 59-67 for converting message having a first communication protocol format into a second communication protocol format (transformer), and col.10 lines 27-34 for second message router (switch) to send the second message formatted based on a second communication protocol (transformed message), to one of the plurality of interfaces of one of the communication systems (processing nodes)).

Regarding claim 2, Brody complies with all the limitations in claim 1, and also discloses a transforming switch (Brody col.9 lines 11-29 for communication switch 154 including a translation processor 240).

Regarding claim 3, Brody complies with all the limitations in claim 1, and also discloses a message director coupled to the transformer and switch to make switching decision for the message based upon an application data in the message, and then to output the switching decision to the switch (Brody col.10 lines 26-34 for message interpreter 350 which identify the target communication device contained in the second message (switching decision), and see fig.9 for second router 356 as the switch, the first and second communication protocols as the transformer, and the message interpreter 350 as the message director).

Regarding claim 4, Brody complies with all the limitations in claim 1, and also disclose that the transformer selects a transformation template to transform the message based on one or more of the following in the message matching a predetermined pattern or value: an identification of an application to process a portion of the message (Brody col. 12 lines 30-51 for identifying second protocol server which changes the generic message to the second communication protocol format (transforming template) based on the communication switch 154 utilizing a table look up (predetermined pattern)).

Regarding claim 6, Brody discloses all the limitations in claim 1 and also discloses a transforming switch coupled between a network and a plurality of servers or processing nodes (Brody fig.2 for communication switch (transforming switch) 154, PSTN (network) and communication devices 34, 54, and 52 (processing nodes)).

Regarding claim 21, Brody discloses receiving a message, determining if a transformation should be performed on the message (Brody col.7 lines 59-67 for passing a received message directly to transmitter 304 when no conversion is needed (determination)), identifying a transform template to be used to transform the message, and transforming the message from a first format to a second format using the identified transform template (Brody col. 12 lines 22-52 for identifying the second communication server which convert the generic message to a second communication protocol format (transformation template) and received message (first format)), and switching the message to a selected server or processing node (Brody col. 10 lines 27-34 for routing second message to one of the plurality of interfaces based on the identify the targeted communication device (processing node)).

Regarding claim 22, Brody complies with all the limitations in claim 21, and also discloses that identifying a transform is based upon a first portion of the message (Brody col. 12 lines 30-40 for the communication protocol server is identified based on the second communication protocol and col.11 lines 26-30 where the protocol is can be read in the header information of the message (first portion protocol)), while the switching is based upon second portion of the message (Brody col.10 lines 27- 34 for routing message based on the identifying a targeted communication device contained within the second message (destination second portion)).

Regarding claim 23, Brody complies with all the limitations in claim 22, and also discloses that the first portion of the message comprises an identification of an application to process a portion of the message (Brody col.13 lines 45-50 where a portion of the communication information can be identification information (portion of the message), col.10 lines 53-65 for determiner 288 receiving communication information to identify first and second communication device and the protocol used by each device, and based on this information, the origination message is routed to the protocol servers that convert the message from one format to another (identifying an application to process the message) col.15 lines 1-13).

Regarding claim 29, is the apparatus of the method in claim 21, and in addition includes means having instructions thereon (Brody col. 9 lines 60-67 for a communication switch 154 (means) which can be implemented by any device that process digital information in response of operational instructions). Therefore claim 29 is rejected on the same rationale.

Regarding claim 30, Brody discloses an apparatus coupled to a network and one or more processing nodes (Brody col.3 lines 58-67- col.4 lines 1-22 for telephone network 12 coupled to

wire-lines devices, as facsimile machine 11, cable box 17, etc and wireless communication systems as PDAs, computer with wireless modems, etc (processing nodes)), the apparatus to receive a message, to transform the message from a first format to a second format, and to output the message (Brody col.3 lines 20-57 for receiving a message from a first communications device, for the first communications protocol server then converting the received message having a first communication protocol format (first format) into a generic protocol message, converting the generic message to a second communications protocol (second format), and for the converted second communications protocol message being sent to the second communications device (output message).

Regarding claim 32, Brody discloses an apparatus coupled to a first processing node and a second processing node, the apparatus to receive a message from the first processing node via a first connection, to transform the message from a first format to a second format, and to output the message to the second processing node via a second connection (Brody col.3 lines 20-57 for receiving a message from a first communications device (first processing node), for the first communications protocol server then converting the received message having a first communication protocol format (first format) into a generic protocol message, converting the generic message to a second communications protocol (second format), and for the converted second communications protocol message being sent to the second communications device (second processing node) (output message), and fig.2 for separate connections of the communication systems (processing nodes to the system) such as PDAs, computer with wireless modems, cellular phones, etc col.4 lines 9-22).

Regarding claim 34, Brody discloses receiving a request message at a first processing node (Brody col. 14 lines 54-65 origination message including request for a call and the identity of hand set 52); generating a response message and outputting the response message (Brody col. 15 lines 1-10 for in response, base station provides a call setup complete message to protocol server 160 (generating message and output)); transforming the message from a first data format to a second data format; sending the transformed response message to a second processing node (Brody col. 10-34 for message in generic protocol format converted in the inverter to the second communication protocol and for sending the message to hand set 52 (processing node)).

Regarding claim 35, Brody discloses sending a first message from a first processing node to a transforming switch (Brody col. 10 lines 60-67 to col. 11 lines 1-18 for communication switch 154 having a message interpreter 350 that receives a message and col. 14 lines 54-65 for hand set 54 (first processing node) transmitting call originating message); transforming the first message from a first format to a second format (Brody col. 10 lines 18-26 for changing the message from a first message (first format) converted to a generic message and convert the generic message into a second communication protocol format); sending the transformed first message from the transforming switch to a second processing node (Brody col. 10 lines 27-34 for second message (transformed message) being routed to one of the plurality of interfaces to a communication device (processing node)); generating a second message in response to the first message, sending the second message from the second processing node to the transforming switch (Brody col. 15 lines 35-46 for answer response created and routed by hand set 52 (second processing node) to the communication switch 154 (transforming switch)); transforming the second message from the second format to the first format (Brody col. 35-46 for converting the

Art Unit: 2141

answer (second format) to generic message and converting generic message to first communication protocol format); and sending the transformed second message to the first processing node (Brody col.15 lines 35-46 for message in the first communication protocol format (transformed message) routed to hand set 54 (first processing node)).

Regarding claim 36, Brody discloses sending a first message from a first processing node to a transforming switch (Brody col. 10 lines 60-67 to col.11 lines 1-18 for communication switch 154 having a message interpreter 350 that receives a message and col.14 lines 54-65 for hand set 54 (first processing node) transmitting call originating message); transforming the first message from a first format to a second format (Brody col.10 lines 18- 26 for changing the message from a first message (first format) converted to a generic message and convert the generic message into a second communication protocol format); sending the transformed first message from the transforming switch to a second processing node (Brody col. 10 lines 27-34 for second message (transformed message) being routed to one of the plurality of interfaces to a communication device (processing node)); generating a second message in response to the first message, sending the second message from the second processing node to the transforming switch (Brody col.15 lines 35-46 for answer response created and routed by hand set 52 (second processing node) to the communication switch 154 (transforming switch)); transforming the second message from the third format to the fourth format (Brody col.35-46 for converting the answer (third format) to generic message and converting generic message to first communication protocol format (fourth format)); and sending the transformed second message to the first processing node (Brody col.15 lines 35-46 for message in the first communication protocol format (transformed message) routed to hand set 54 (first processing node)).

Regarding claim 37, Brody discloses all the limitations in claim 36, and also discloses that the second format is the same as the third format, and the fourth format is the same as the first format (Brody col. 15 lines 10-25 for call message from hand 54 changed to second communication protocol format to be sent to hand set 52 and col.35-46 for message from hand set 52 sending an answer message changed to the first communication format routed to hand set 54, meaning that the second format and the third format are the same because is the format of the hand set 52 and the first and fourth format being the same because are the format of the hand set 54).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brody et al. U.S. Patent No. 6,278,697 B1 in view of Jamtgaard et al. U.S. Patent No. 6,430,624 B1.

Regarding claim 7 and 8, Brody complies with all the limitations in claim 1, but fails to disclose transforming the message from a first XML format to a second XML format. However

Jamtgaard discloses a translation server taking information from the internet in XML data and generating an output in WML or other formats that are compatible with the particular information appliance (Jamtgaard col.4 lines 68-67 to col.5 lines 1-6).

Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the above invention suggested by Brody and combining it with the invention disclosed by Jamtgaard.

One of ordinary skill in the art would have been motivated to generate an output that is compatible with the particular information appliance (Jamtgaard col.5 lines 1-6), to re-formatting HTML or XML web pages on-the-fly to formats that individual devices can utilize (Jamtgaard col.2 lines 12-25), and “to organize the content for display on the devices, the received content information may be mapped into a hierarchy of groups so that the content information can be optimally formatted for display on the devices according to the input/output format, such as the display screen size parameters of the devices” (Jamtgaard col.2 lines 48-59).

Regarding claim 8, Brody complies with all the limitations in claim 1, but fails to disclose transforming the message from a first XML to HTML or vice versa. However Jamtgaard discloses a translation server taking information from the internet in XML data or HTML data and generating an output in HTML, XML data or other formats that are compatible with the particular information appliance (Jamtgaard col.4 lines 68-67 to col.5 lines 1-6).

Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the above invention suggested by Brody and combining it with the invention disclosed by Jamtgaard.

One of ordinary skill in the art would have been motivated to generate an output that is compatible with the particular information appliance (Jamtgaard col.5 lines 1-6), to re-formatting HTML or XML web pages on-the-fly to formats that individual devices can utilize (Jamtgaard col.2 lines 12-25), and “to organize the content for display on the devices, the received content information may be mapped into a hierarchy of groups so that the content information can be optimally formatted for display on the devices according to the input/output format, such as the display screen size parameters of the devices” (Jamtgaard col.2 lines 48-59).

11. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brody et al. U.S. Patent No. 6,278,697 B1 in view of Krishna U.S. Patent No. 6,477,646 B1.

Regarding claim 9, Brody complies with all the limitations in claim 1, but fails to disclose security accelerator to encrypt and/or decrypt messages. However Krishna teaches a cryptography accelerator implemented in router or gateways to provide IP packet encryption/decryption (Krishna col.1 lines 19-30).

Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the above invention suggested by Brody in view or Sitaraman and combining it with the invention disclosed by Krishna.

One of ordinary skill in the art would have been motivated to do this combination to enhance system performance and data security (Krishna col.2 lines 20-30).

12. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brody et al. U.S. Patent No. 6,278,697 B1 in view of Voshmgir.

Regarding claim 10, Brody complies with all the limitations in claim 1, but fails to disclose a validator to validate messages based on one or more validation templates. However Shermin Voshmgir teaches validating XML to conform the syntax and a DTD (validation template) and a parser as a validity checker (validator) (Voshmgir Valid XML documents p.20).

Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the above invention suggested by Brody and combining it with the invention disclosed by Voshmgir.

One of ordinary skill in the art would have been motivated to do this combination because in the case of the markup languages defined by XML, the DTD provides the grammatical structure to bring order to the elements of the language (Voshmgir Valid XML documents p.20).

13. Claims 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brody et al. U.S. Patent No. 6,278,697 B1 in view of Voshmgir.

Regarding claim 11, Brody discloses a transformer to transform the message from a first format to a second format and a switch coupled to the transformer to switch or output the transformed message to a selected processing node or server, (Brody col.7 lines 59-67 for converting message having a first communication protocol format into a second communication protocol format (transformer), and col.10 lines 27-34 for second message router (switch) to send the second message formatted based on a second communication protocol (transformed message), to one of the plurality of interfaces of one of the communication systems, and fig. 9 for second message router (switch) coupled to the first and second communication protocol

Art Unit: 2141

servers, which together, works as a transformer, to change the message from one protocol format to another, col.10 lines 18-26).

But Brody fails to disclose a validator to validate messages based on one or more validation templates. However Shermin Voshmgir teaches validating XML to conform the syntax and a DTD (validation template) and a parser as a validity checker (validator) (Voshmgir Valid XML documents p. 20).

Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the above invention suggested by Brody and combining it with the invention disclosed by Voshmgir.

One of ordinary skill in the art would have been motivated to do this combination because in the case of the markup languages defined by XML, the DTD provides the grammatical structure to bring order to the elements of the language (Voshmgir Valid XML documents p. 20).

14. Claims 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brody et al. U.S. Patent No. 6,278,697 B1 in view of Voshmgir in further view of Krishna U.S. Patent No. 6,477,646 B1.

Regarding claim 12, the above combinations, complies with all the limitations in claim 11 but fails to disclose security accelerator coupled to the validator to encrypt and/or decrypt messages. However Krishna teaches a cryptography accelerator implemented in router or gateways to provide IP packet encryption/decryption (Krishna col.1 lines 19-30).

Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the above invention suggested by Bechwith in view or Sitaraman and combining it with the invention disclosed by Krishna.

One of ordinary skill in the art would have been motivated to do this combination to enhance system performance and data security (Krishna col.2 lines 20-30).

Regarding claim 13, the above combination complies with all the limitations in claim 12 and also teaches the validation templates provided either within the message or retrieved from an external location based on a reference to the validation template provided in the message (Voshgmir teaches Document Type Declaration which are information for the parser, upon which the validity of XML documents are checked and also teaches that the document Type declaration can contain: reference to an external DTD (Document Type Definition) (validation template), and markup declaration (internal DTD) (Voshgmir Document Type Declaration p.31).

15. Claims 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brody et al. U.S. Patent No. 6,278,697 B1 Voshgmir in further view of Leppinen et al. U.S. Patent No. 6,675,219 B1

Regarding claim 14, the above combination complies with all the limitations in claim 11, but fails to disclose, adding an indication that the message has been validated. However Leppinen teaches setting a header as a validation header, http header, or an Etag header to determine that the content has been validated (Leppinen col.2 lines29-35).

Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the above invention suggested by Brody in view of Voshmgir and combining it with the invention disclosed by Leppinen.

One of ordinary skill in the art would have been motivated to do this combination in order to avoid validating twice, the content consuming time and resources (Leppinen col.1 lines 40-45).

16. Claims 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brody et al. U.S. Patent No. 6,278,697 B1 Voshmgir in further view of Pendersen et al. U.K. patent Application. GB 2348083 A.

Regarding claim 17, the above combination complies with all the limitations in claim 11, and also teaches a transformer that transforms the message based on a first portion of the message that matches a first predetermined pattern or value (Brody col.12 lines 21-43 reading first communication protocol from the header (first portion of the message), col.11 lines 37-40 for conversion o the message having a first communication protocol format can be done by using a correlation table (predetermine values), and the switch that switches the message to a selected processing node or server (Brody col.12 lines 27-34 for second message router routing message to a targeted communication device (processing node). But the above combination fails to disclose that switching the message is based on a second portion of the message that matches a second predetermined pattern or value.

However Pedersen teaches identifying the type of content received (second portion) and based on a routing table 72, obtaining an address associated with the content to transfer the content to such address (Pedersen p.9 lines 21-26).

Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the above invention suggested by Brody in view of Brody and combining it with the invention disclosed by Pedersen.

One of ordinary skill in the art would have been motivated to do this combination in order to route content depending on the content type that an application can use (Pedersen p.9 lines 4-20).

Regarding claim 18, the above combination complies with all the limitations in claim 17, and also disclose that the first portion of the message comprise a address (Brody col.11 lines 26-30 for reading header information in the message where is well known that the headers have destination and source address) and that the second portion of the message comprises information that describes the content of the message (Pendersen p.9 lines 21-26 for type of content received (second portion) and based on a routing table 72).

Regarding claim 19, the above combination complies with all the limitations in claim 17, and also discloses that the second portion comprises a second portion of the message before the message is transformed (Brody col.6 lines 22-28 for a message whether protocol specific or generic, will include some addressing information such that is routed to the appropriate server, Brody col.11 lines 37-40 for message having a first communication protocol format converted to a generic communication protocol, and Pendersen p.9 lines 21-26 for routing based on

content wherein this means that the second portion of the message, which is the content, is in the message before being transformed in order to route the message to the appropriate server).

Regarding claim 20, the above combination complies with all the limitations in claim 17, and also discloses that the second portion comprises a second portion of the message after the message is transformed (Brody abstract for first converting between protocols and second, routing the converted message and Pedersen p.9 lines 21-26 for routing based on content, wherein this means that the message has a content (second portion) which is used to route the message after it is transformed).

17. Claims 24 are rejected under 35 U.S.C. 103(a) as being unpatentable Brody et al. U.S. Patent No. 6,278,697 B1 in view of Pedersen et al. U.K. patent Application. GB 2348083 A.

Regarding claim 24, Brody complies with all the limitations in claim 22, but fails to disclose that the second portion of the message comprises information that describes the content of the message. However Pedersen teaches identifying the type of content received and based on a routing table 72, obtaining an address associated with the content to transfer the content to such address (Pedersen p.9 lines 21-26).

Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the above invention suggested by Brody in view of Brody and combining it with the invention disclosed by Pedersen.

One of ordinary skill in the art would have been motivated to do this combination in order to route content depending on the content type that an application can use (Pedersen p.9 lines 4-20).

18. Claims 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brody et al. U.S. Patent No. 6,278,697 B1 in view of Levac et al. U.S. Patent No. 6,034,970.

Regarding claim 25, Brody discloses receiving a message, determining if a transformation should be performed on the message (Brody col.7 lines 59-67 for passing a received message directly to transmitter 304 when no conversion is needed (determination)), identifying a transform template to be used to transform the message, transforming the message from a first format to a second format using the identified transform template (Brody col. 12 lines 22-52 for received message (first format) and identifying the second communication server which convert the generic message to a second communication protocol format (transformation template)), and switching the message to a selected server or processing node (Brody col. 10 lines 27-34 for routing second message to one of the plurality of interfaces based on the identify the targeted communication device (processing node)).

But Brody fails to disclose identifying a transform template to be used to transform the message-based information that describes the content of the message. However Levac teaches that depending on the content of the received .msa file data stream the communication device interface converts the embedded message in the .msa file or the variable data to a protocol

compatible with the communication device used by the designated recipients (Levac col.6 lines 47-55)

Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the above invention suggested by Brody and combining it with the invention disclosed by Levac.

One of ordinary skill in the art would have been motivated to do this combination in order to create an intelligent network that automatically converts messages to the proper protocol of the various communication devices (Levac col. lines 8-15) that is also compatible with the character display (Levac col.2 lines 57-67 to col. 3 lines 1-15).

19. Claims 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brody et al. U.S. Patent No. 6,278,697 B1 in view of Levac et al. U.S. Patent No. 6,034,970 in further view of Gillis et al U.S. Patent No. 6,286,035 B1.

Regarding claim 26, the above combination complies with all the limitations in claim 25, but fails to disclose validating the receiving message. However Gillis discloses validating a command message produced by a network element (Gillis abstract).

Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the above invention suggested by Brody and combining it with the invention disclosed by Gillis.

One of ordinary skill in the art would have been motivated to do this combination in order to check a message and its contents to ensure that the message and its constituent parts are valid for a given message set (Gillis col.1 lines 54-57).

20. Claims 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brody et al. U.S. Patent No. 6,278,697 B1 in view of Levac et al. U.S. Patent No. 6,034,970 in further view of Gillis et al U.S. Patent No. 6,286,035 B1 in further view of Leppinen et al. U.S. Patent No. 6,675,219 B1

Regarding claim 27, the above combination complies with all the limitations in claim 26, but fails to disclose adding an indication that the message has been pre-validated. However Leppinen teaches setting a header as a validation header, http header, or an Etag header to determine that the content has been validated (Leppinen col.2 lines29-35).

Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the above invention suggested by Brody in view of Levac in further view of Gillis and combining it with the invention disclosed by Leppinen.

One of ordinary skill in the art would have been motivated to do this combination in order to avoid validating twice, the content consuming time and resources (Leppinen col.1 lines 40-45).

21. Claims 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brody et al. U.S. Patent No. 6,278,697 B1 in view of Levac et al. U.S. Patent No. 6,034,970 in further view of Ben-Ayed et al. U.S. Patent No. 5,218,676 B1

Regarding claim 28, the above combination complies with all the limitations in claim 25, but fails to disclose that switching the message based on tags within the message.

However Ben-Ayed teaches a message having control information (message tag) to which the routing system at each node is responsive (Ben-Ayed abstract).

Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the above invention suggested by Brody in view of Levac and combining it with the invention disclosed by Leppinen.

One of ordinary skill in the art would have been motivated to do this combination in order to reduce the amount of hardware and the cost of a communication network (Ben-Ayed col.2 lines 55-61), and to provide an improved direct multi-computer network having routing nodes associated with processing nodes (Ben-Ayed col.4 lines 12-15).

22. Claims 31 and 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brody et al. U.S Patent No. 6,278,697 B1 in view of Gillis et al U.S. Patent No. 6,286,035 B1.

Regarding claim 31 and 33, Brody complies with the limitations in claim 30 and 32, and also discloses a transformer to selectively transform messages and a switch coupled to the transformer to switch or output the messages.

But Brody fails to disclose a validator to validate messages. However Gillis discloses validating a command message produced by a network element (Gillis abstract).

Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the above invention suggested by Brody and combining it with the invention disclosed by Gillis.

Art Unit: 2141

One of ordinary skill in the art would have been motivated to do this combination in order to check a message and its contents to ensure that the message and its constituent parts are valid for a given message set (Gillis col.1 lines 54-57).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xiomara Y. Ortiz whose telephone number is (703) 305-6783. The examiner can normally be reached on Monday-Friday from 7:30AM to 4:00PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (703) 305-4003. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Application/Control Number: 09/741,807
Art Unit: 2141

Page 26

Xiomara Y. Ortiz
Patent Examiner
Art Unit 2141

RUPAL DHARIA
SUPERVISORY PATENT EXAMINER

A handwritten signature in black ink, appearing to read 'Rupal Dharia', with a long horizontal stroke extending to the right.